



THE WEIZMANN SCIENCE PRESS OF ISRAEL

National Council for Research and Development

ISRAEL **Journal of** **MATHEMATICS**

Volume 46
1983



מוסד ויצמן לפרסומים במדעי הטבע ובטכנולוגיה, ירושלים
THE WEIZMANN SCIENCE PRESS OF ISRAEL

Publishers of the Following Journals

ISRAEL JOURNAL OF BOTANY; ISRAEL JOURNAL OF CHEMISTRY;
 ISRAEL JOURNAL OF EARTH-SCIENCES; ISRAEL JOURNAL OF MATHEMATICS;
 ISRAEL JOURNAL OF TECHNOLOGY; ISRAEL JOURNAL OF ZOOLOGY;

JOURNAL D'ANALYSE MATHÉMATIQUE

(SCIENCE FOR YOUTH) **לרשת מדע לנוער**
 (SCIENCE) **ציל עתון מדעי לכל**

Supporting Institutions

THE NATIONAL COUNCIL FOR RESEARCH AND DEVELOPMENT;
 BAR-ILAN UNIVERSITY; BEN GURION UNIVERSITY OF THE NEGEV;
 TECHNION — ISRAEL INSTITUTE OF TECHNOLOGY; TEL AVIV UNIVERSITY;
 THE HEBREW UNIVERSITY OF JERUSALEM; THE WEIZMANN INSTITUTE OF SCIENCE

GENERAL EDITORIAL BOARD

D. ABIR
 A. DVORETZKY
 C. ELATA
 H. EYAL-GILADI
 M. JAMMER
 J. JORTNER
 L. REINHOLD
 Y. WEILER

Executive Editor

L. LESTER

Assistant Editor

P. GREENBERG

**ISRAEL JOURNAL
 OF MATHEMATICS**

Formerly: Bulletin of The Research Council
 of Israel, Section F

Editorial Board

H. FURSTENBERG AND A. ZABRODSKY
*The Hebrew University of Jerusalem,
 Executive Editors*
 S. ABARBANEL
Tel Aviv University
 S. A. AMITSUR
The Hebrew University of Jerusalem
 B. GRÜNBAUM
University of Washington
 I. N. HERSTEIN
The University of Chicago
 A. LEVY
The Hebrew University of Jerusalem
 J. LINDENSTRAUSS
The Hebrew University of Jerusalem
 M. MAGIDOR
The Hebrew University of Jerusalem
 E. NETANYAHU
*Technion — Israel Institute of Technology,
 Haifa*
 A. PAZY
The Hebrew University of Jerusalem
 B. WEISS
The Hebrew University of Jerusalem

Three volumes of the Israel Journal of Mathematics are to be published in 1983,
 Vols. 44, 45 and 46

Subscriptions should be addressed to the Weizmann Science Press of Israel, P.O.B. 801,
 Jerusalem 91007 Israel. Subscription fees per volume, U.S.\$42.00+\$2.00 postage &
 handling (\$126.00+\$6.00 postage & handling for the 3 vols.). Individual members of
 mathematical societies may subscribe at a 50% discount.

ISRAEL JOURNAL OF MATHEMATICS

TABLE OF CONTENTS, VOLUME 46, 1983

ARTSTEIN, Z. Distributions of random sets and random selections	313
CELLINA, A. AND M. V. MARCHI Non-convex perturbations of maximal monotone differential inclusions	1
COHEN, S. D. Likeable functions in finite fields	123
EVANS, R. J. Character sum analogues of constant term identities for root systems	189
FEIT, W. The computations of some Schur indices	274
FREEDMAN, M. A. Product integrals of continuous resolvents: existence and nonexistence	145
FURSTENBERG, H. AND Y. KIFER Random matrix products and measures on projective spaces	12
HUTCHINSON, J. J. AND M. L. TEPLY A module as a torsion-free cover	305
KERR, J. W. Very long chains of annihilator ideals	197
KIFER, Y. <i>See</i> H. Furstenberg	
MAIER, B. J. On existentially closed and generic nilpotent groups	170
MARCHI, M. V. <i>See</i> A. Cellina	
McMULLEN, P., CH. SCHULZ AND J. M. WILLS Polyhedral 2-manifolds in E^3 with unusually large genus	127
MERRIS, R. Extensions of the Hadamard determinant theorem	301
PAVEL, N. H. Semilinear equations with dissipative time-dependent domain perturbations	103
ROITBERG, J. Monomorphisms and epimorphisms in homotopy theory	205
ROSEN, J. D.*-Generalized polynomial identities of finite dimensional central simple algebras	97
ROSENFELD, M. Are all simple 4-polytopes Hamiltonian?	161
SCHULZ, CH. <i>See</i> P. McMullen	
SHELAH, S. Classification theory for non-elementary classes I: the number of uncountable models of $\psi \in L_{\omega_1, \omega}$. Part A	212
SHELAH, S. Classification theory for non-elementary classes I: the number of uncountable models of $\psi \in L_{\omega_1, \omega}$. Part B	241

SMITH, S. P. Central localization and Gelfand–Kirillov dimension	33
TEPLY, M. L. <i>See</i> J. J. Hutchinson	
THALER, M. Transformations on $[0, 1]$ with infinite invariant measures	67
TOMCZAK-JAEGERMANN, N. The Banach–Mazur distance between symmetric spaces	40
WILLS, J. M. <i>See</i> P. McMullen	